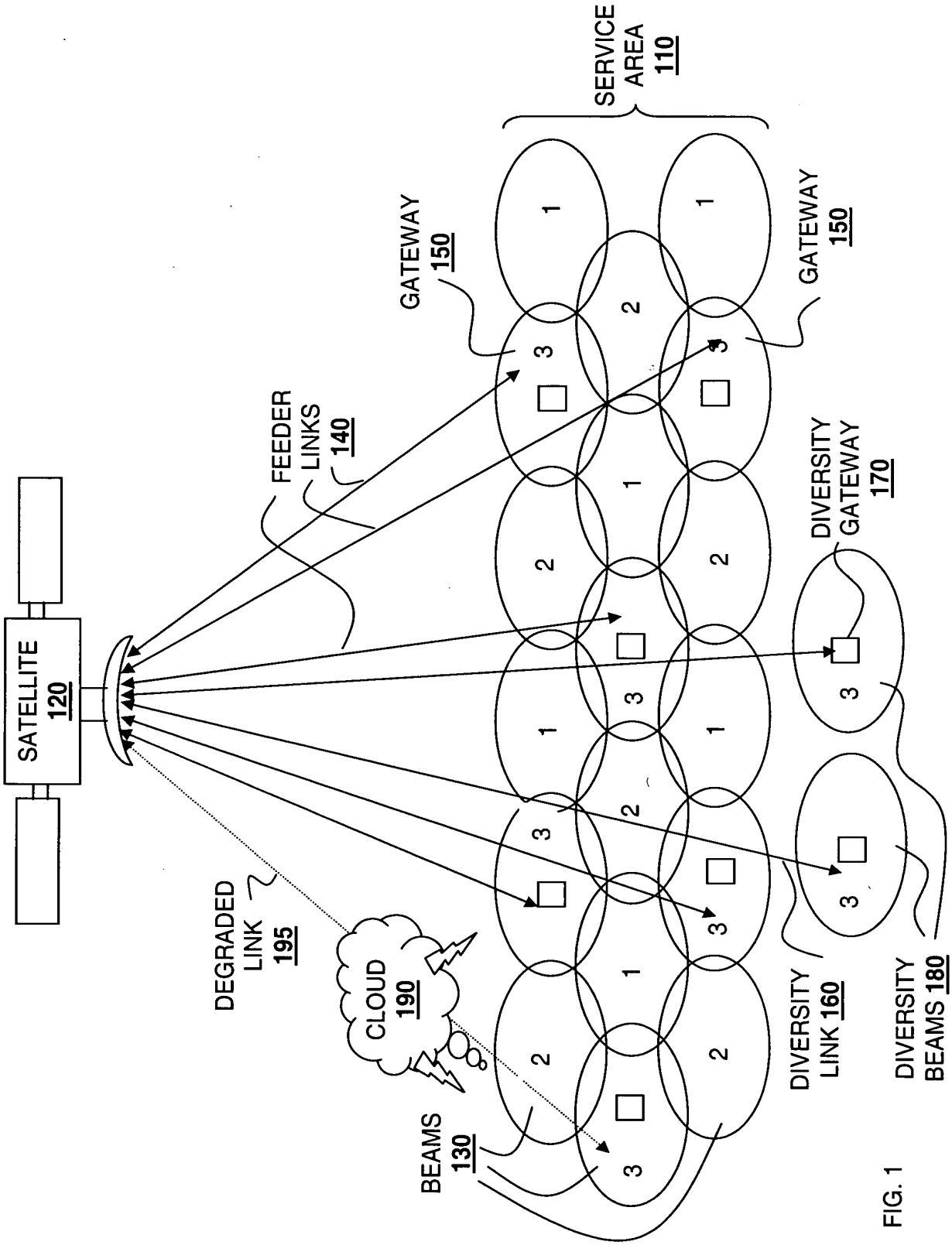

SATELLITE 120
FEEDER LINKS 140
GATEWAY 150
GATEWAY 150
SERVICE AREA 110
DIVERSITY GATEWAY 170
DEGRADED LINK 195
CLOUD 190
BEAMS 130
DIVERSITY LINK 160
DIVERSITY BEAMS 180

FIG. 1

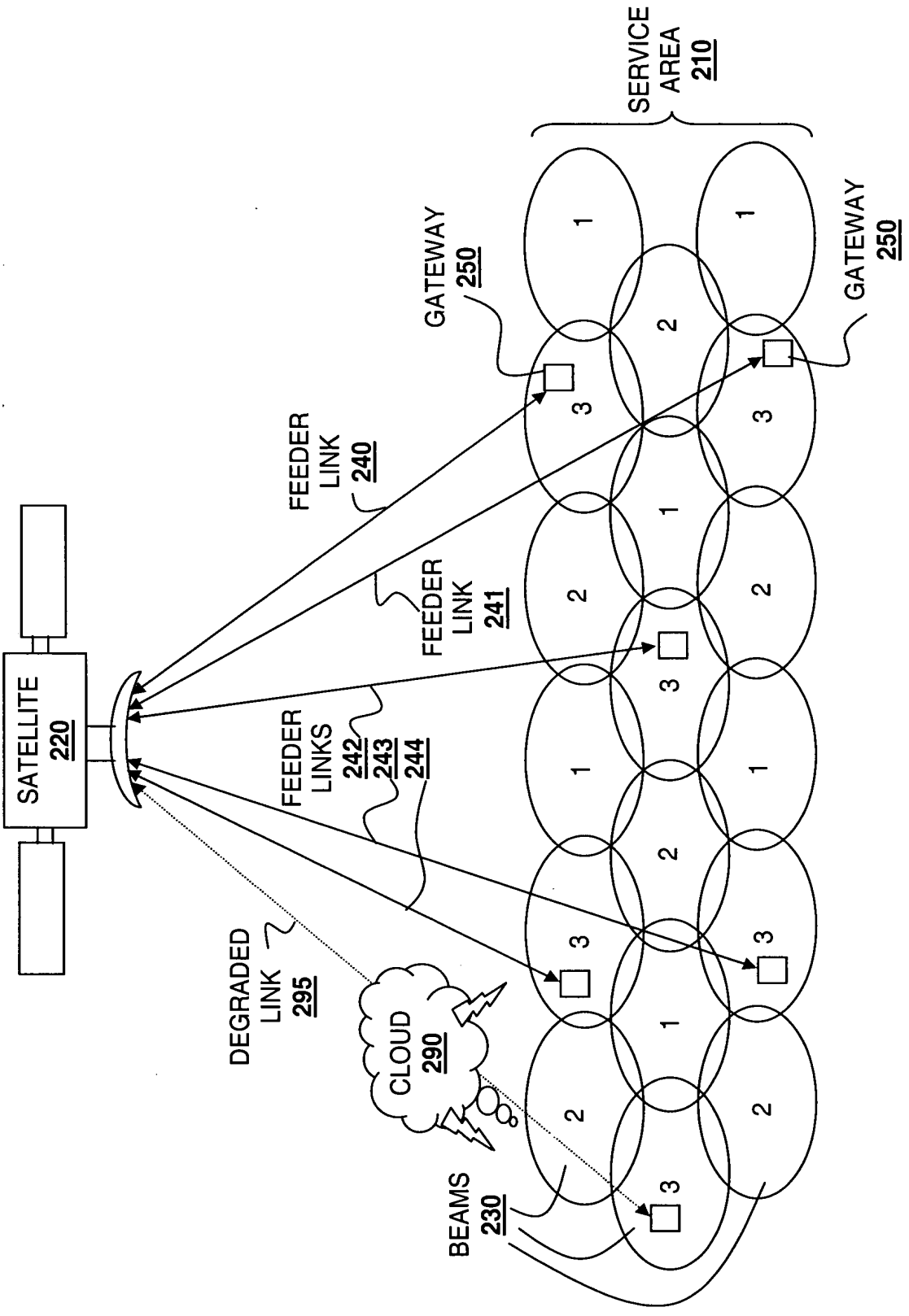

SATELLITE
220
FEEDER
LINK
240
FEEDER
LINK
241
FEEDER
LINKS
242
243
244
GATEWAY
250
GATEWAY
250
SERVICE
AREA
210
DEGRADED
LINK
295
CLOUD
290
BEAMS
230

FIG. 2

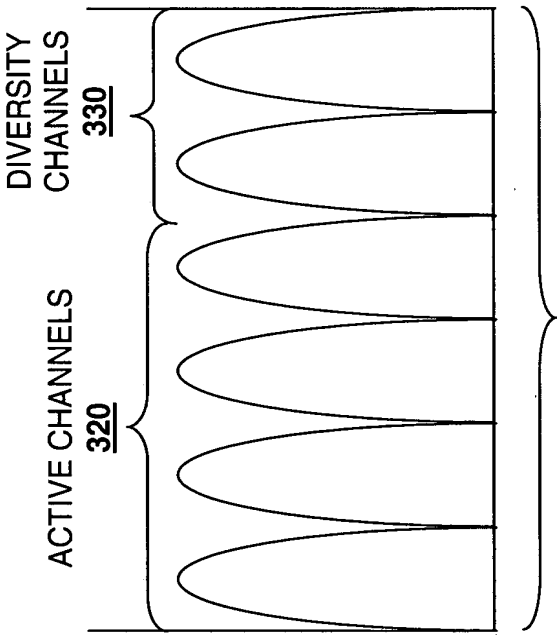

DIVERSITY CHANNELS 330
ACTIVE CHANNELS 320
AVAILABLE BEAM BANDWIDTH 310

FIG. 3

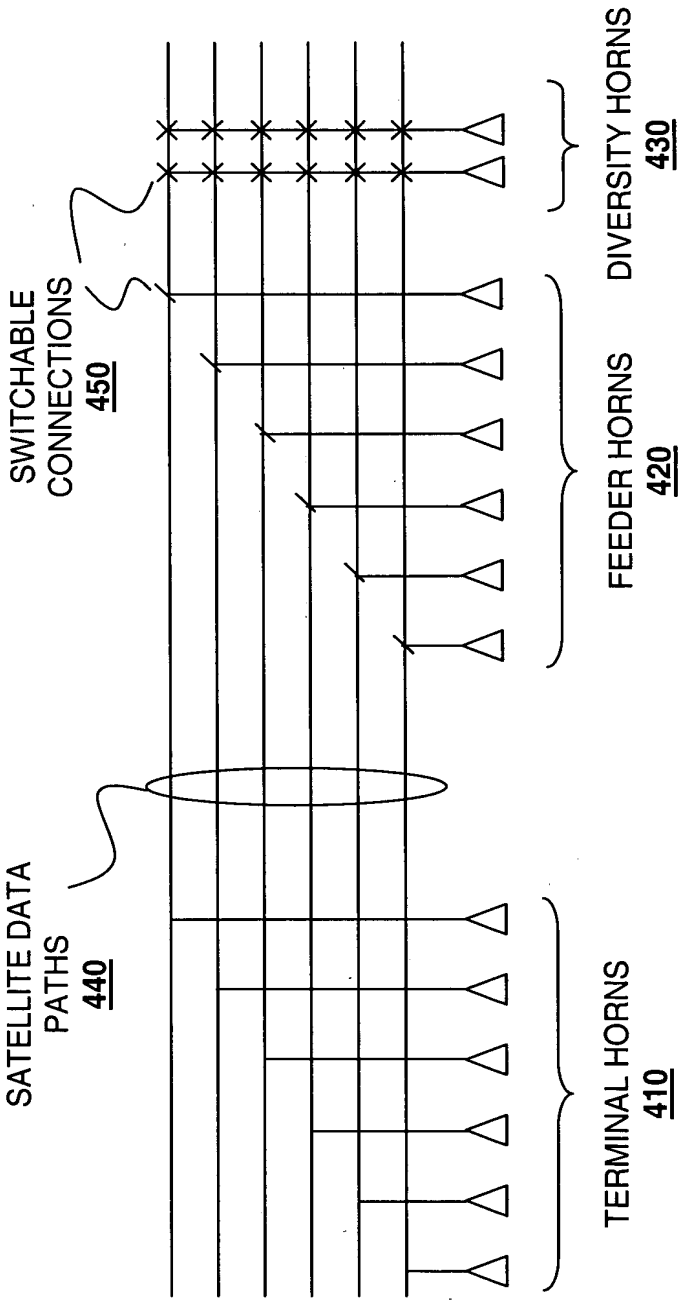

SATELLITE DATA PATHS 440
SWITCHABLE CONNECTIONS 450
TERMINAL HORNS 410
FEEDER HORNS 420
DIVERSITY HORNS 430

FIG. 4

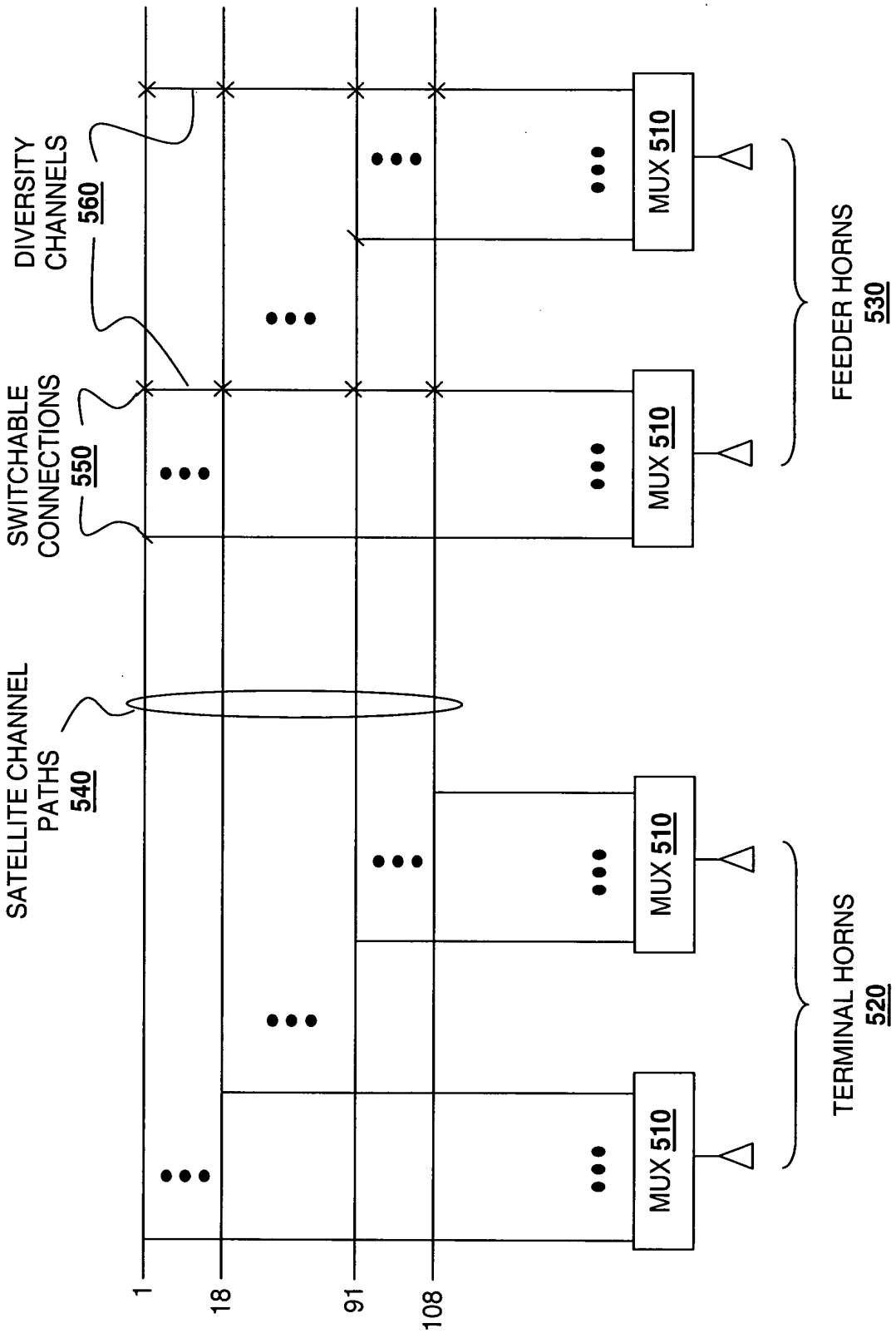

SATELLITE CHANNEL PATHS 540
SWITCHABLE CONNECTIONS 550
DIVERSITY CHANNELS 560
MUX 510
MUX 510
MUX 510
MUX 510
FEEDER HORNS 530
TERMINAL HORNS 520
1
18
91
108

FIG. 5

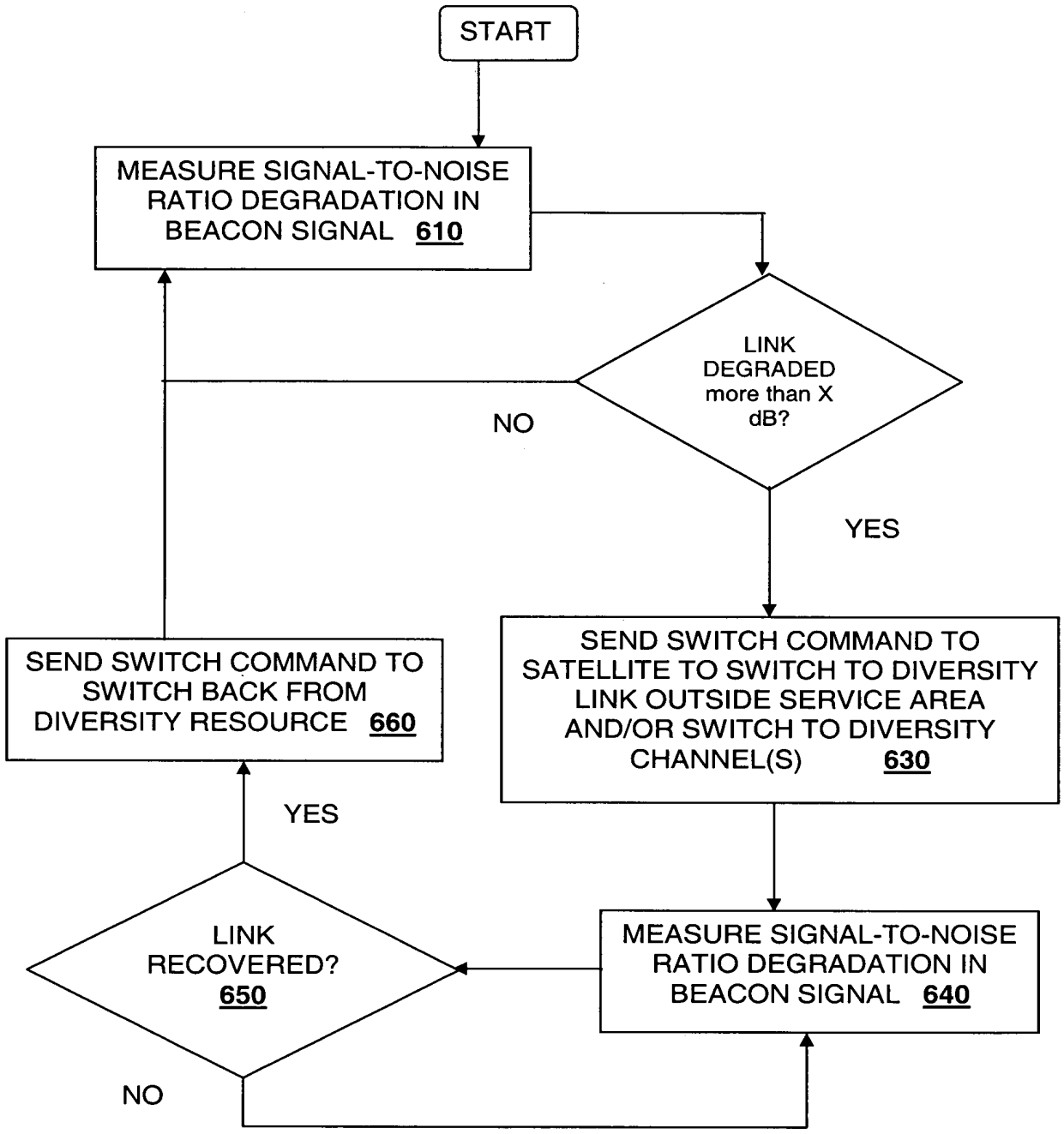

START
MEASURE SIGNAL-TO-NOISE RATIO DEGRADATION IN BEACON SIGNAL 610
LINK DEGRADED more than X dB?
NO
YES
SEND SWITCH COMMAND TO SATELLITE TO SWITCH TO DIVERSITY LINK OUTSIDE SERVICE AREA AND/OR SWITCH TO DIVERSITY CHANNEL(S) 630
MEASURE SIGNAL-TO-NOISE RATIO DEGRADATION IN BEACON SIGNAL 640
LINK RECOVERED? 650
NO
YES
SEND SWITCH COMMAND TO SWITCH BACK FROM DIVERSITY RESOURCE 660

FIG. 6

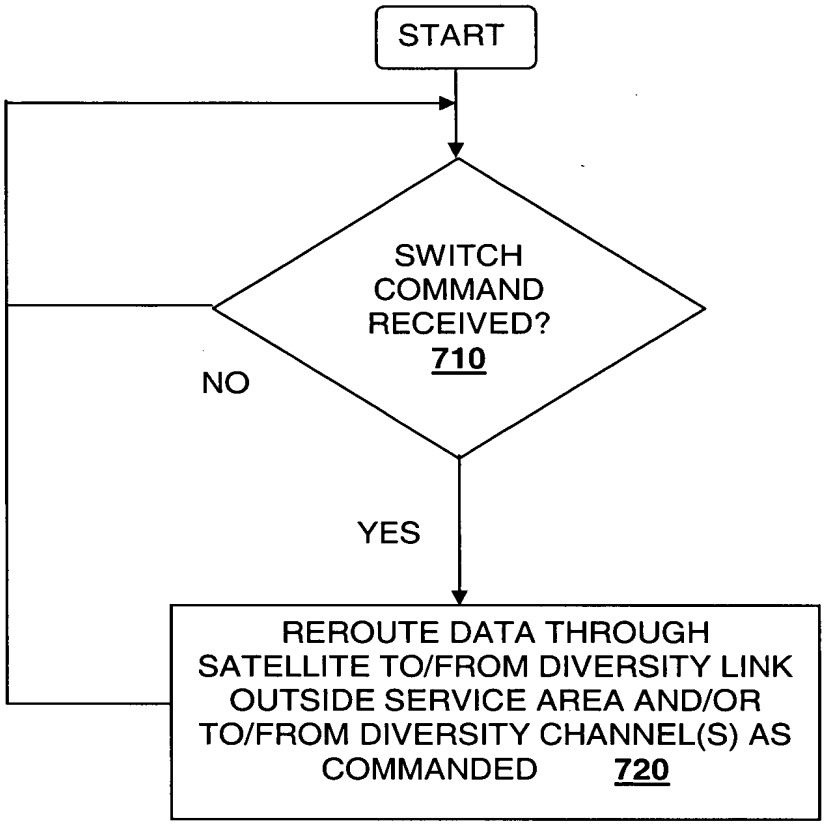

START
SWITCH COMMAND RECEIVED? 710
NO
YES
REROUTE DATA THROUGH SATELLITE TO/FROM DIVERSITY LINK OUTSIDE SERVICE AREA AND/OR TO/FROM DIVERSITY CHANNEL(S) AS COMMANDED 720

FIG. 7

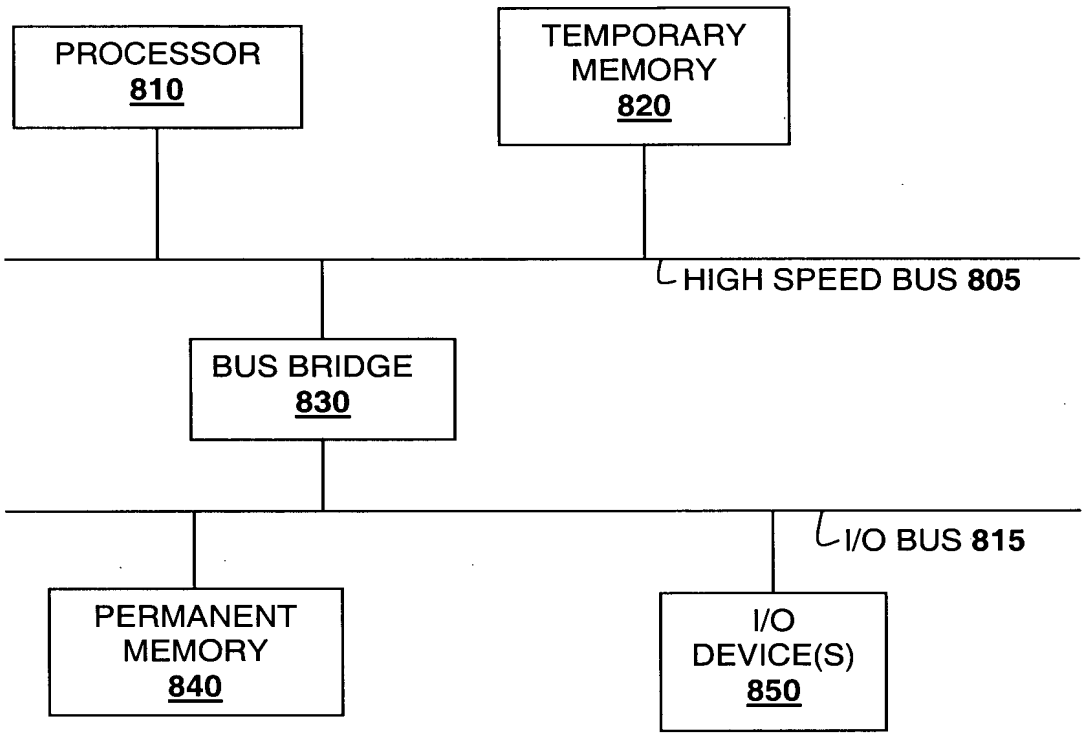

PROCESSOR
810
TEMPORARY
MEMORY
820
HIGH SPEED BUS 805
BUS BRIDGE
830
I/O BUS 815
PERMANENT
MEMORY
840
I/O
DEVICE(S)
850

FIG. 8

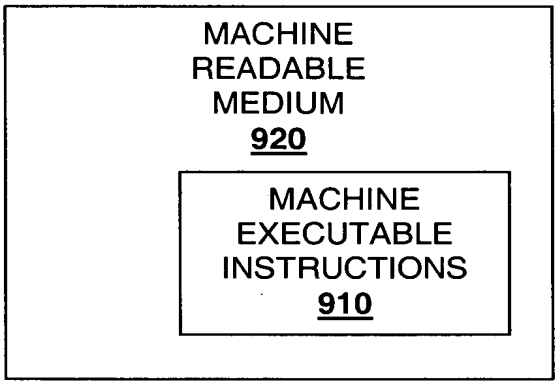

MACHINE
READABLE
MEDIUM
920
MACHINE
EXECUTABLE
INSTRUCTIONS
910

FIG. 9

FIG. 10

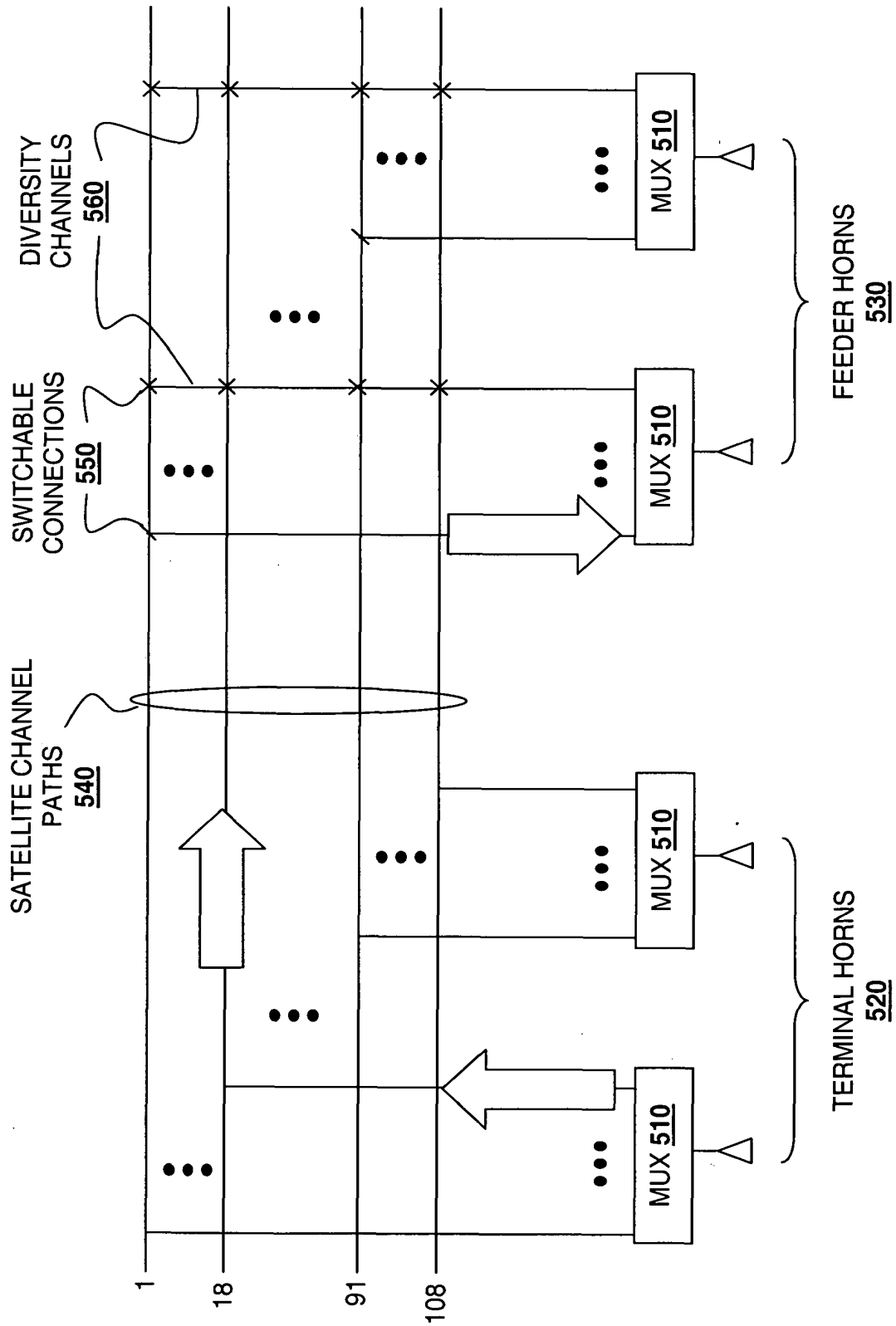
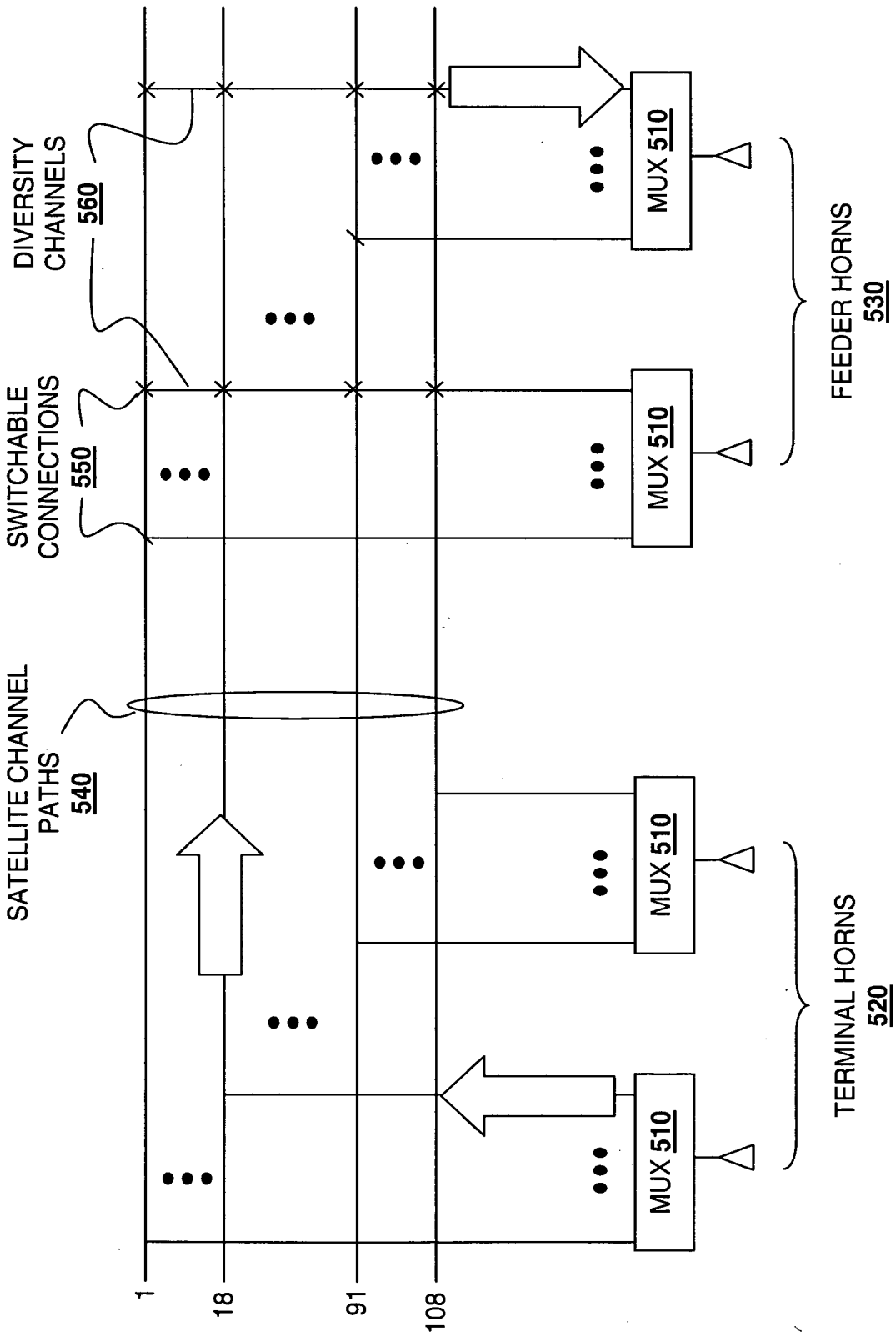

SATELLITE CHANNEL PATHS 540
SWITCHABLE CONNECTIONS 550
DIVERSITY CHANNELS 560
MUX 510
MUX 510
MUX 510
MUX 510
FEEDER HORNS 530
TERMINAL HORNS 520
1
18
91
108

FIG. 11


SATELLITE CHANNEL PATHS 540
SWITCHABLE CONNECTIONS 550
DIVERSITY CHANNELS 560
MUX 510
MUX 510
MUX 510
MUX 510
FEEDER HORNS 530
TERMINAL HORNS 520
1
18
91
108